

0094054

TANK 4 AND LEACHATE TRANSMISSION SYSTEM REPORT

CONSTRUCTION QUALITY ASSURANCE (CQA)

# SECTION

7 OF 9



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

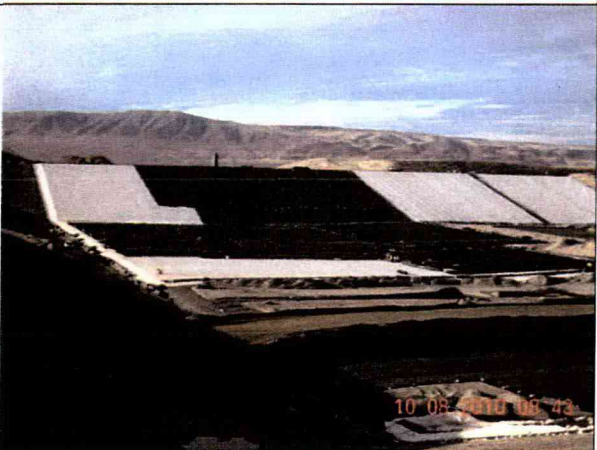
### Geosynthetic Placement (Continued)



Facing NW – ESI deploying secondary geocomposite on the north side of the Cell 10 floor.



Facing NW – Deployment of geocomposite in Cell 10.



Facing SW – ESI is continuing with the secondary geocomposite deployment on the south slope.



Facing S – ESI completing deployment of secondary geocomposite on the floor of Cell 10.



Facing N – ESI finishing the primary geocomposite near the rain flap on the north embankment of Cell 10.



Facing S – ESI is placing 8-oz. geotextile over the primary drain rock directly south of the Cell 9 sump.

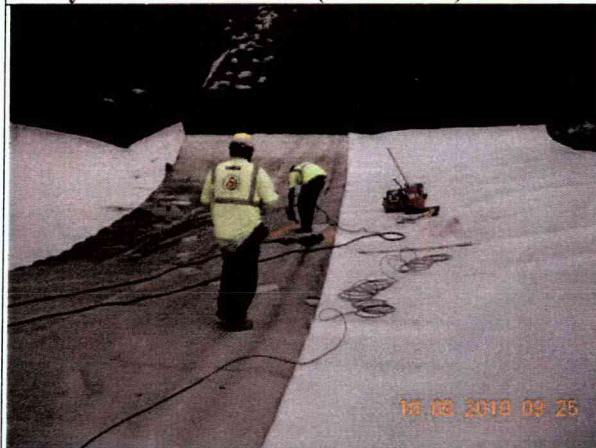




ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Geosynthetic Placement (Continued)



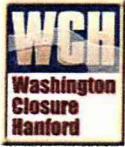
Facing N – ESI completing repairs to the primary geomembrane in the Cell 10 sump prior to installing the 100-mil rub sheet.



Facing N – ESI placing primary composite on the north slope of the Cell 10 near the sump. Also, ESI is welding the 100-mil rub sheet together in the Cell 10 sump.



Facing NE – the Cell 10 sump is complete with the 100-mil rub sheet and 16-oz fabric in place.



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Drainage Gravel

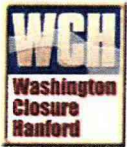


Facing W – TWS is beginning the placement of the Type C drainage gravel in the Cell 9 sump.



Facing SW – TWS placing Type C drainage gravel in the cell 9 sump.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Leachate Collection Pipe



Facing S – TWS placing the primary 12-in riser pipe through the Cell 9 crest pad building and riser trench.



Facing S – TWS walking the primary 12-in riser pipe down the Cell 9 riser.



Facing W – BMWC utilizing a fusion coupler to join the leachate collection pipe to the riser pipe in Cell 9.



Facing S – TWS placing the primary 18-in riser pipe onto the HDPE flat stock in the Cell 9 sump.

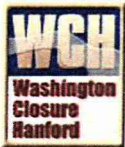


Facing N – All the primary and secondary riser pipes penetrating through the Cell 9 crest pad stem wall.



Facing N – TWS placing drainage gravel over the leachate collection pipe in Cell 9.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Operations Placement



Facing S – TWS placing the north operations haul road into Cell 9.



Facing S – TWS turning the north operations haul road north to the toe of the north slope of Cell 9.



Facing S – TWS placing operations up the north slope of Cell 9.



Facing S – TWS beginning to place operations at the top of the north slope of Cell 9. (Placement was subsequently halted by WCH)

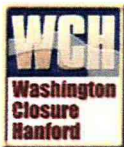


Facing S – TWS turning the north operations road toward the south berm in Cell 9, while a dozer spreads soil up the north berm.



Facing NW – TWS placing operations fill on the north berm of Cell 9, while two (2) excavators backfill the north anchor trench.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Operations Placement



Facing NW – TWS placing operations fill on the north berm of Cell 9.

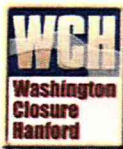


Facing S – TWS placing operations fill on the north berm of Cell 9.



Facing S – TWS spreading operations soil in a 3-ft high lift across the floor of Cell 9.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Leachate Transmission System



Facing NW – TWS installing a riser ring on MH-35.



Facing NE – TWS backfilling around MH-35.



Facing NE – TWS backfilling and grading around MH-35.



Facing W – TWS compacting backfill around MH-35.



Facing S – TWS stripping concrete forms from around the Tank #4 ringwall.



Facing NW – TWS stripping concrete forms from around the Tank #4 ringwall.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Leachate Transmission System (Continued)



Facing NW – TWS installing a riser ring on MH-35.



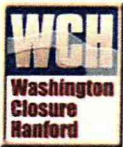
Facing NE – TWS backfilling around MH-35.



Facing NE – TWS backfilling and grading around MH-35.



Facing W – TWS compacting backfill around MH-35.



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 35 (10/4/10 TO 10/9/10)

### Anchor Trench



Facing E – TWS placing fill in the north anchor trench of Cell 10.

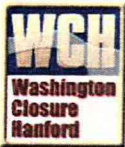


Facing E – TWS backfilling the Cell 9 anchor trench with an excavator, while a second excavator compacts the fill in Cell 10.



Facing NE – TWS compacting the backfilling the Cell 9 anchor trench.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Geosynthetic Placement



Facing W - ESI installing primary liner on the floor of Cell 10.



Facing W - ESI double wedge welding primary liner on the floor of Cell 10.



Facing N - ESI double wedge welding primary liner on the south slope of Cell 10.



Facing S - ESI moving the rub sheet used to deploy primary liner over the secondary geocomposite.

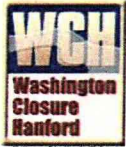


Facing E - ESI double wedge welding primary liner in Cell 10.



Facing Down - ESI performing non-destructive seam pressure test using a small air compressor and pressure gauges.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Geosynthetic Placement (Continued)



Facing SE - ESI deploying primary geocomposite on the south slope of Cell 10.



Facing N - ESI deploying and double wedge welding geotextile on the floor of Cell 10.



Facing S - ESI deploying primary geotextile on the floor of Cell 10.

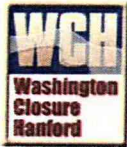


Facing W - ESI deploying primary geocomposite on the south slope of Cell 10.



Facing S - ESI zip tying primary geocomposite on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Cell 9 Sump



Facing W – TWS is preparing to place Type B drainage gravel in the Cell 9 primary sump.



Facing W – The Cell 9 primary sump prior to placing the primary drainage gravel.



Facing S – TWS haunching Type B drainage gravel under the primary riser pipes in the Cell 9 primary sump.



Facing N – TWS placing and grading Type B drainage gravel in the Cell 9 primary sump.



Facing S – TWS grading type C drainage gravel in the Cell 9 sump with the aid of the TWS surveyor.



Facing NE – TWS and BMWC preparing to tie the 6-in drain line in to the 18-in riser pipe outside of the crest pad 9 building.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Cell 9 Sump



Facing N – TWS and BMWC preparing to tie the 6-in drain line in to the 18-in riser pipe outside of the crest pad 9 building.



Facing NE – TWS and BMWC tying the 6-in drain line in to the 18-in riser pipe outside of the crest pad 9 building.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Cell 10 Sump



Facing N – TWS surveyor marking the location of the primary riser pipe.



Facing S – TWS placing the 12-in primary riser pipe into the Cell 10 sump.



Facing W – BMWC connecting the 12-in primary riser pipe to the in-place leachate collection pipe on the floor of Cell 10.



Facing W – BMWC grinding the ends prior to fusion welding the 12-in primary riser to the leachate collection pipe in Cell 10.

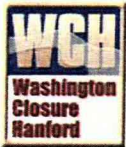


Facing S – TWS placing Type B drainage gravel in the Cell 10 sump.



Facing Down – BMWC using stainless steel straps to secure the primary 18-in riser pipe to the HDPE flatstock in the Cell 10 sump.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Operations Placement



Facing SW – TWS spreading operations soil in Cell 9.



Facing S – TWS using three CAT dozers to push operations soil up the north slope of Cell 9.



Facing SW – TWS grading operations soil in Cell 9 to 3-ft in height.



Facing S – TWS spreading operations soil in Cell 9.

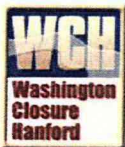


Facing S – TWS using a CAT 312 with attached hoe-pack to compact the backfill in the Cell 9 primary riser trench.



Facing E – TWS using a Cat D8 to push operations soil up from the toe of the slope.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Operations Placement (Continued)



Facing SE - TWS loading Komatsu trucks with a CAT 5110 excavator from the operations soil stockpile.



Facing S - TWS placing operations soil into the Cell 9 riser trench.



Facing S - TWS placing an operations haul road across the floor of Cell 9 toward the south berm.



Facing S - TWS using a Cat D6 push operations road up the north slope adjacent to the Cell 10 riser trench.

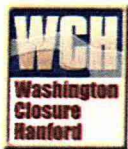


Facing W - TWS clipping the operations soil in the north slope of Cell 9 to grade with a CAT D6 GPS



Facing S - TWS placing operations soil on the floor of Cell 9.



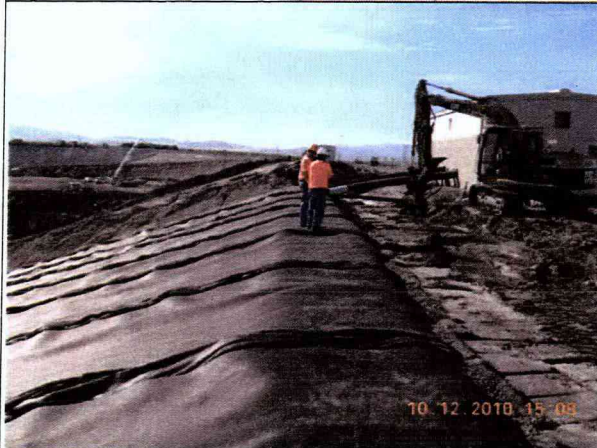


ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Operations Placement (Continued)



Facing W – TWS using a CAT 312 with attached hoe-pack to compact backfill in the north anchor trench.

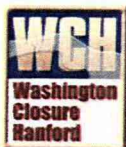


Facing E – TWS backfilling and compacting the north anchor trench.



Facing E – TWS backfilling and compacting the north anchor trench in Cell 10.

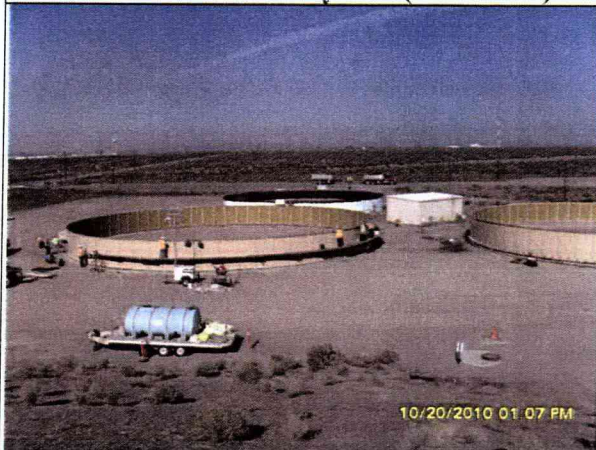




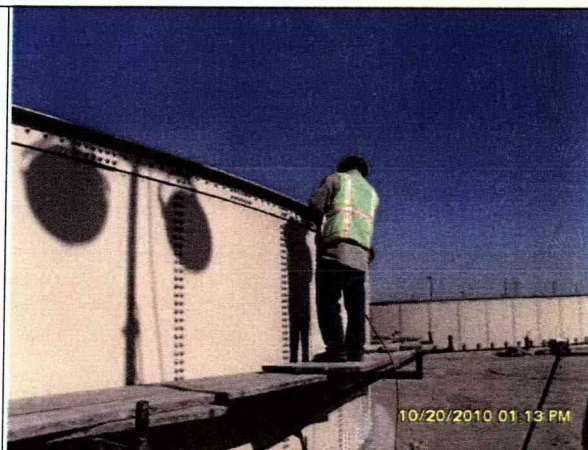
ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Leachate Transmission System (Continued)



Facing N – Tank installers working on erecting Tank #4.



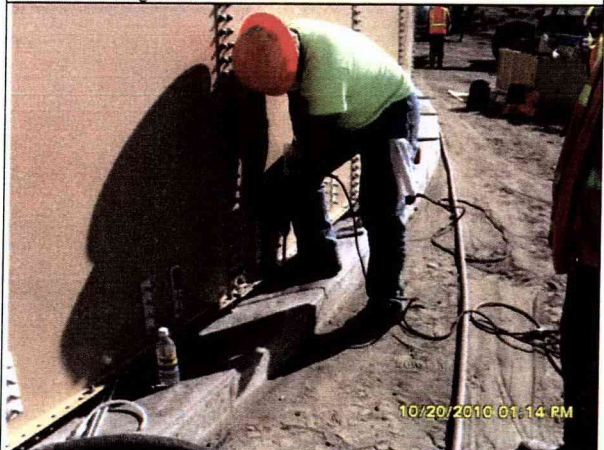
Facing E – Tank installers tightening bolts on the tank ringwall.



Facing W – Tank installers drilling the holes for the anchor bolts in the Tank #4 ringwall.



Facing W – Tank installers removing the dust and drilling fines from the drilling the anchor bolt holes in the Tank #4 ringwall.



Facing W – Tank installers installing the anchor bolt in the Tank #4 ringwall.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Geosynthetic Placement



Facing NW – ESI deploying primary geotextile on the floor of Cell 10.



Facing S – ESI performing vacuum box tests on all extrusion welds.



Facing E – ESI sewing the 16-oz fabric covering the primary liner.



Facing N – ESI preparing the weld the primary liner to the secondary liner along the east termination of Cell 10.

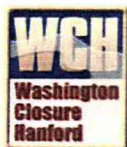


Facing Down – ESI hot wedge welding the 16-oz fabric covering the primary liner.



Facing W – ESI welding the secondary pipe boots to the HDPE pipe south of the Cell 9 crest pad building.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Geosynthetic Placement



Facing NE – ESI extrusion welding the pipe boots for the secondary riser pipes in Cell 10.



Facing N – ESI rewelding the pipe skirt for the Cell 9 lysimeter pipe.



Facing Down – Due to the configuration of the pipe, a new boot was welded on the Cell 9 lysimeter pipe.



Facing SE – ESI rewinding the Cell 9 lysimeter pipe boot with geotextile.

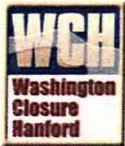


Facing N – ESI deploying geotextile on the floor of Cell 10.



Facing S – ESI is deploying and sewing primary geocomposite on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Geosynthetic Placement



Facing E – ESI is deploying primary geocomposite on the south slope of Cell 10.



Facing N – ESI deploying primary geocomposite on the south slope of Cell 9.



Facing NW – ESI continuing to deploy primary geocomposite on the south slope of Cell 9.



Facing S – ESI is deploying primary geocomposite on the south slope of Cell 9.



Facing S – ESI is deploying primary geocomposite on the south slope of Cell 10.



Facing W – ESI backtracking and completing the butt seaming of the geocomposite on the south slope of Cell 9.



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Leachate Collection



Facing S – TWS is backfilling primary drainage gravel around the 12-in collection pipe in Cell 10.



Facing SW – TWS grading the primary drainage gravel in Cell 10 with a CAT D6 with GPS.



Facing NW – TWS placing primary drainage gravel in Cell 10 with a CAT D6 with GPS.



Facing N – TWS preparing to set a section of 12-in collection pipe in the floor of Cell 10.

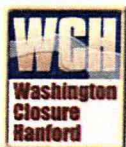


Facing Down – TWS preparing to weld the recently placed section of 12-in collection pipe with the existing 12-in collection pipe.



Facing Down – TWS preparing to weld the recently placed section of 12-in collection pipe with the existing 12-in collection pipe.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Leachate Collection (Continued)



Facing S – TWS backfilling the 12-in collection pipe in Cell 10 with a CAT 312.



Facing S – TWS covering the 12-in collection pipe in Cell 10 with 1-ft of primary drainage gravel.



Facing N – TWS completing gravel placement on the north half of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Operations Placement



Facing SW – TWS propping the rainflap up at an angle while placing operations soil on the north slope.



Facing SW – TWS propping the rainflap up at an angle while placing operations soil on the north slope.



Facing NE – TWS placing and grading the termination berm on the north slope of Cell 10 with a CAT D6 GPS dozer.



Facing W – TWS placing operations soil in Cells 9 and 10.



Facing NW – TWS is building the Cell 9/10 berm using a CAT D6 with GPS.



Facing S – TWS placing operations soil on the north half of Cell 10.

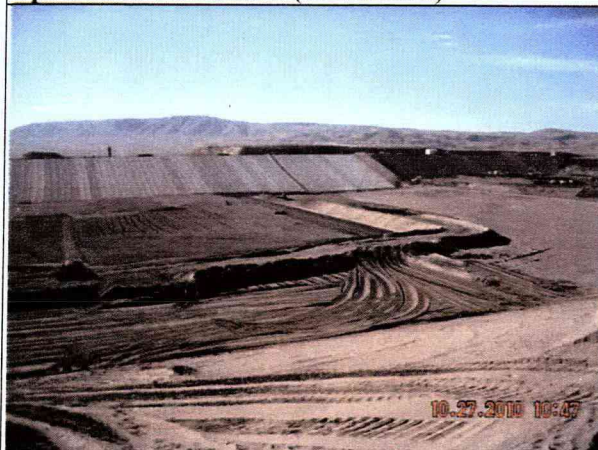




ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 38 (10/25/10 TO 10/30/10)

### Operations Placement (Continued)



Facing SW – TWS constructing a south haul road across Cell 9 to the toe of the south slope.



Facing S – TWS placing operations soil on the north half of Cell 10.



Facing SE – TWS is loading Komatsu trucks using the CAT 5110 excavator on the operations soil stockpile located southeast of Cell 10



Facing SW – TWS spreading the south road across Cell 9 with two (2) dozers. A second south road across Cell 10 was constructed.

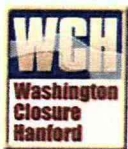


Facing N – TWS constructing a second haul road south across Cell 10. A D6 dozer continues to place the Cell 9/10 termination berm.



Facing NW – TWS constructing a center ramp into Cell 10 at the mid-point of the north and south access ramps.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Geosynthetic Placement



Facing W – ESI is completely welding primary liner to secondary liner in the south anchor trench.



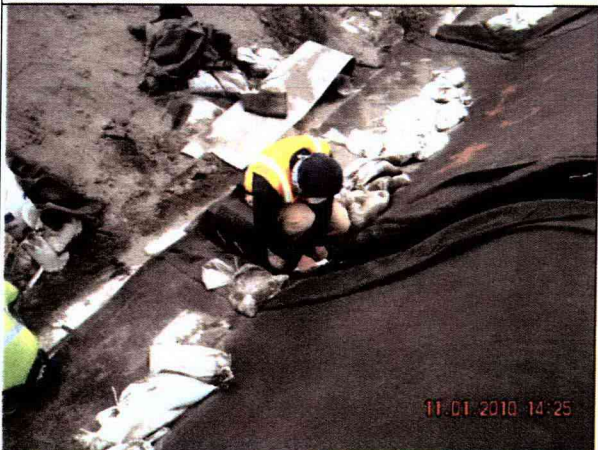
Facing N – ESI is tying the new primary geocomposite in cell 9 to the existing primary composite in Cells 7/8



Facing E – ESI is welding the primary liner to the secondary liner in the south anchor trench.



Facing N – ESI is placing primary composite on the south slope of Cell 10.

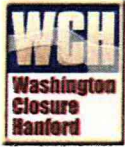


Facing Down – ESI is using zip ties to secure the seams of the primary geocomposite in the south anchor trench in Cell 10.



Facing NE – ESI placing geocomposite on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Geosynthetic Placement (Continued)



Facing SW – ESI continuing to deploy geocomposite on the south slope of Cell 10.



Facing N – ESI deploying 8oz. geotextile over the south toe of Cell 9.



Facing E – ESI is securing the 8-oz fabric on the floor of Cell 10 to the primary geocomposite on the south slope of cell 10.



Facing W – ESI deploying 8 oz. geotextile near the toe of the south slope of Cell 9.

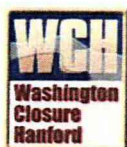


Facing W – ESI is placing primary geocomposite on the south slope of Cell 10.



Facing NW – ESI continuing to place geocomposite on the floor of Cells 9 and 10 at the toe of the south slope.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Geosynthetic Placement (Continued)



Facing NE – ESI is placing primary geocomposite on the south slope of Cell 10.



Facing N- ESI using plastic zip tie to connect the geocomposite panels together.

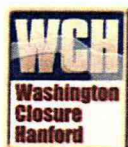


Facing Down – ESI is repairing the 16-oz fabric on the floor of Cell 10. TWS snagged the fabric while excavating for the collector pipe.



Facing SW – ESI deploying geocomposite on the Cell 10 slope and geotextile on the floor of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Drainage Gravel



Facing S - TWS beginning to place drainage gravel along the south toe of Cell 10.



Facing E - TWS placing drainage gravel along the south toe of Cell 10.



Facing NE - TWS placing drainage gravel along the south toe of Cell 10.



Facing NW - TWS placing drainage gravel near the toe of the south slope with a CAT D6 dozer.

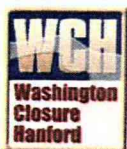


Facing N - TWS continuing to place drainage gravel on the floor of Cell 10.



Facing NW - TWS spreading the drainage gravel in a 1-ft thick loose lift with the CAT 312 excavator.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

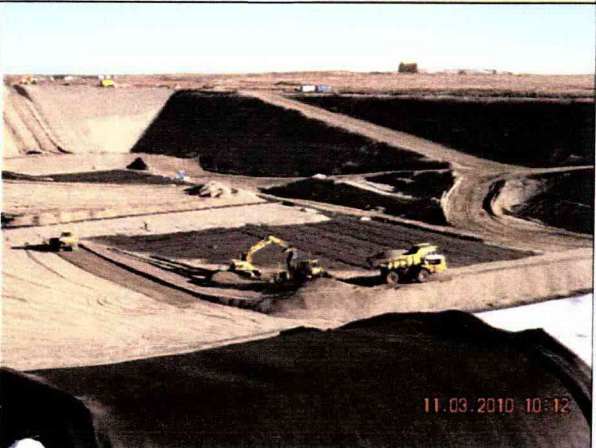
### Drainage Gravel (Continue)



Facing NE – TWS spreading drainage gravel on the Cell 10 floor with a trackhoe.



Facing NE – TWS spreading gravel with a dozer and trackhoe on the floor of Cell 10.



Facing NE – TWS hauling and spreading drainage gravel on the floor of Cell 10.



Facing NE – TWS completing spreading of the primary drainage gravel in Cell 10.

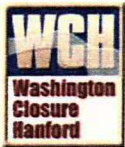


Facing N – TWS grading the drainage gravel to a thickness of 1-ft in on the floor of Cell 10.



Facing NE – TWS continuing to cut the drainage gravel to grade in Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Leachate Collection Pipe



Facing N – TWS preparing to place the last section of 12-in collection pipe in Cell 10.



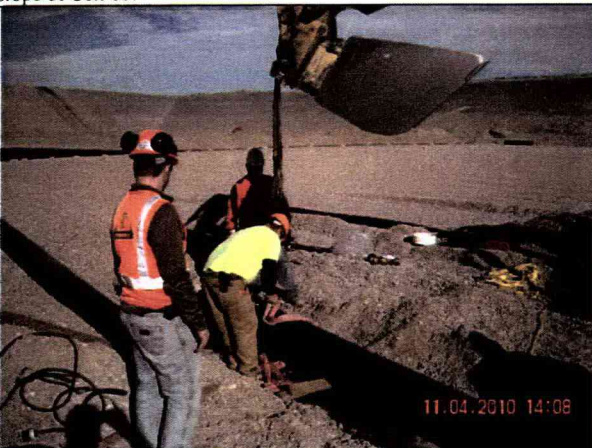
Facing SE – TWS moving the 12-in collection pipe in position to be slid down the south embankment of Cell 10.



Facing NE – TWS pushing the 12-in collection pipe down the south slope of Cell 10.



Facing N – TWS pulling the last section of 12-in collection pipe onto the floor of Cell 10.

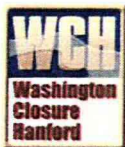


Facing NE – TWS joining the last section of 12-in collection pipe on the floor of Cell 10.



Facing N – TWS placing drainage gravel over the 12-in leachate collection pipe in Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Operations Placement



Facing SW - TWS hauling operations soil into Cell 10.



Facing N - TWS placing the last portions of operation on slope of Cell 10 near the NE shoulder.



Facing N - TWS spreading operations soil in the north east corner of Cell 10.



Facing N - TWS placing an operations road diagonally though Cells 9 and 10 to the midpoint of the Cell 9 south slope.

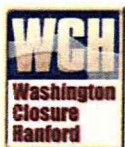


Facing NW - TWS hauling operations soil to the south berm of Cell 9.



Facing N - TWS placing operations soil up the south slope of Cell 9.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Operations Placement (Continued)



11/04/2010 03:13 PM



11/05/2010 03:23 PM

Facing N – TWS placing operations soil on the south slope of Cell 9.

Facing NE – TWS placing operations soil on the south slope of Cell 9.



11.05.2010 14:06

Facing SW – TWS placing operations soil up the south slope of Cell 10.



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Leachate Transmission System



Crest Pad 10 – BMWC preparing to pressure test the Leachate transmission system inside of the crest pad 10 building.



Crest Pad 10 – BMWC pressure gauge for testing the Leachate transmission system inside of the crest pad 10 building.

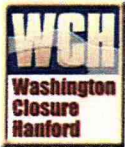


Crest Pad 10 – Beginning pressure of approx. 75-psi.



Crest Pad 10 – Ending pressure of approx. 73-psi.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Anchor Trench Backfill



Facing E – TWS moisture conditioning the backfill in the Cell 9 anchor trench prior to compaction.

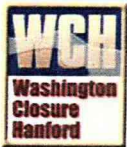


Facing E – TWS using the CAT 330 to place operations soil into the Cell 9 anchor trench.



Facing W – TWS using the CAT 312 with attached hoe-pack to compact the backfill placed in the south anchor trench for Cell 9.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Tank Liner Installation



Tank 3 – ESI placing materials into Tank 3.



Tank 3 – ESI beginning to place 16-oz textile on the walls of Tank 3.



Tank 3 – ESI placing 16-oz textile on the floor of Tank 3.



Tank 3 – ESI placing 16-oz textile on the floor of Tank 3.



Tank 3 – ESI beginning to place secondary 40-mill LLDHE line on the walls in Tank 3.

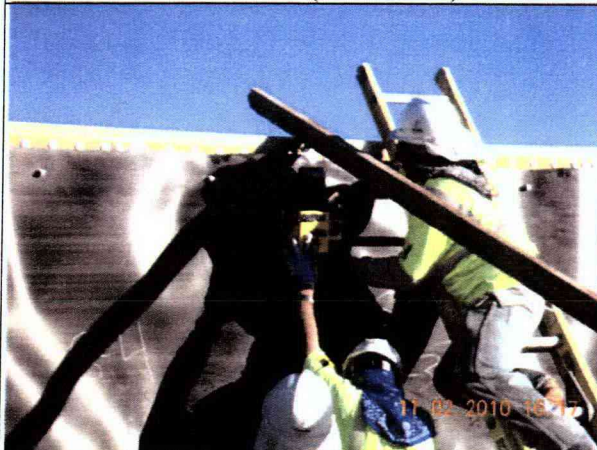


Tank 3 – ESI placing secondary 40-mill LLDHE line on the walls in Tank 3.



## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Tank Liner Installation (Continued)



Tank 3 – ESI using a Demtech double wedge welder to weld the secondary wall panels in Tank 3.



Tank 3 – ESI beginning to place the secondary 40-mil LLDPE liner on the floor of Tank 3.



Tank 3 – ESI placing secondary 40-mil LLDPE liner on the floor of Tank 3.



Tank 3 – ESI fitting the 40-mil liner in Tank 3 to fit around the tank penetrations in the floor.

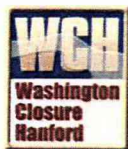


Tank 3 – ESI using a Demtech double wedge welder to weld the wall panels in Tank 3.



Tank 3 – ESI fitting the 40-mil liner in Tank 3 to fit around the tank penetrations in the floor.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Tank Liner Installation (Continued)



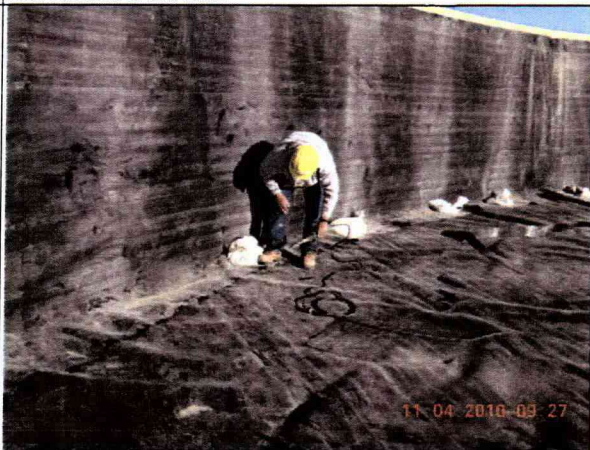
Tank 3 – ESI pressure testing the secondary seams inside of Tank 3.



Tank 3 – ESI installing the baton strip at the top of Tank 3. Only 1/3 were installed at this time.



Tank 3 – ESI installing the baton strip at the top of Tank 3



Tank 3 – ESI leistering the floor panels to the wall panels in Tank 3 in preparation for extrusion welding.

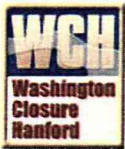


Tank 3 – The secondary floor panels have been leistered to the wall panels in preparation for extrusion welding.



Tank 3 – ESI extrusion welding the secondary floor panels to the secondary wall panels in Tank 3.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 39 (11/1/10 TO 11/6/10)

### Tank Liner Installation (Continued)



Tank 3 – ESI making secondary repairs on the wall of Tank 3.



Tank 3 – ESI vacuum testing all extrusion welds in Tank 3 with CQA oversight.



Tank 4 – ESI installing the secondary wall panels in Tank 4.



Tank 4 – Secondary wall panels installed in Tank 4.

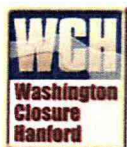


Tank 4 – ESI unrolling precut secondary wall panels in Tank 4.



Tank 4 – ESI installing secondary wall panels in Tank 4.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Geosynthetic Placement



Facing W – ESI continuing to place primary geocomposite on the south slope of Cell 10.



Facing Down – ESI performing vacuum tests on primary repairs on the south slope of Cell 10.



Facing S – ESI placing primary geocomposite on the south slope of Cell 10.



Facing SE – ESI placing primary geocomposite on the south slope of Cell 10.



Facing N – ESI working the rain flap detail on the south slope of Cell 10.



Facing NE – ESI working the rain flap detail on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

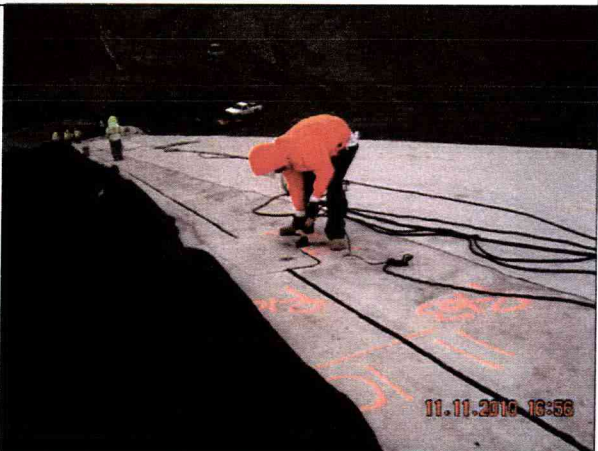
### Geosynthetic Placement (Continued)



Facing N – ESI working the rain flap detail on the south slope of Cell 10.



Facing N – ESI working the rain flap detail on the south slope of Cell 10.



Facing N – ESI making repairs on the south slope of Cell 10.



Facing N – ESI preparing to vacuum test the rain flap extrusion welds on the south slope of Cell 10.



Facing NW – ESI making repairs on the south slope of Cell 10.



Facing W – ESI deploying primary geocomposite on the east end of the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Geosynthetic Placement (Continued)



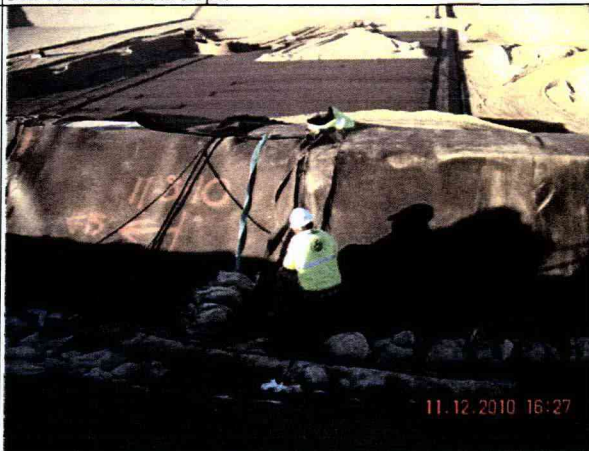
Facing N - ESI placing 16-oz fabric over the east termination of Cell 10 on the south slope.



Facing NE - ESI sewing the 16-oz fabric over the east termination of Cell 10 on the south slope.

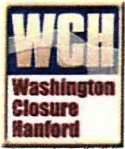


Facing N - ESI vacuum testing the rain flap on the south slope of Cell 10.



Facing N - ESI sewing the flaps for the primary geocomposite near the Cell 10 rain flap in the south anchor trench.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Operations Placement



Facing NE – TWS placing operations soil on the south half of Cell 9.



Facing NE – TWS placing operations soil on the south half of Cell 9.



Facing NW – TWS placing operations soil on the south half of Cell 9.



Facing N – TWS placing operations soil on the south half of Cell 9 with 2- CAT D6 dozers



Facing NE – TWS placing operation on the south half of Cell 9.



Facing W – TWS dumping operations soil near the south toe of Cell 9.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Operations Placement (Continued)



Facing W - TWS using Komatsu trucks to transport operations soil into Cells 9 and 10.



Facing SE - TWS is using a CAT 5110 excavator to load operations soil into Komatsu trucks to be transported into the Cells.



Facing NE - TWS is placing operations soil in Cells 9 and 10.



Facing N - TWS is using 3-CAT D6 dozers to push operations soil up the south slope of Cell 9.



Facing N - TWS is using 1-CAT D6 dozer to push operation soil up the south slope of Cell 9.



Facing NE - TWS building a road out of operations soil along the south toe of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Anchor Trench Backfill



Facing E – TWS using the CAT 312 with attached hoe-pack to compact the backfill placed in the south anchor trench of Cell 9.

Facing E – TWS watering the backfill placed in the south anchor trench of Cell 9.



Facing E – TWS using the CAT 312 with attached hoe-pack to compact the backfill placed in the south anchor trench of Cell 9.

Facing E – TWS using the CAT 312 with attached hoe-pack to compact the backfill placed in the south anchor trench of Cell 10.



Facing E – The CAT D6 dozer has placed the final lift over the south anchor trench of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Tank Liner Installation



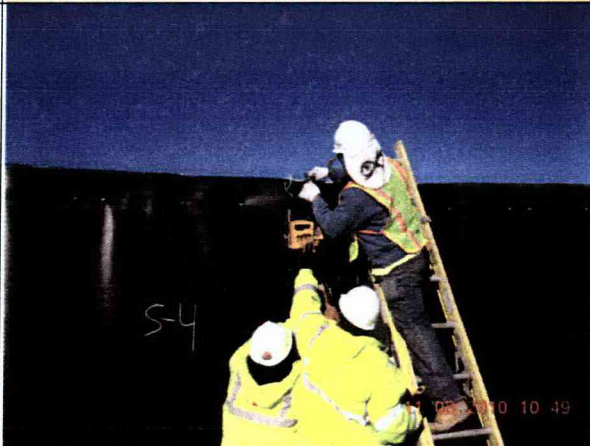
Tank 3- Overnight rains have left standing water in Tank 3.



Tank 3- ESI sweeping Tank 3 so the water can be pumped out of the tank.



Tank 3- ESI sweeping Tank 3 so the water can be pumped out of the tank.



Tank 4- ESI is using a double wedge welder to weld the secondary wall seams in Tank 4.



Tank 4-ESI is preparing the secondary floor panels for Tank 4.



Tank 4-ESI has begun placing the secondary 40-mill LLDPE liner on the floor of Tank 4.





ERDF CONSTRUCTION CELLS 9-10

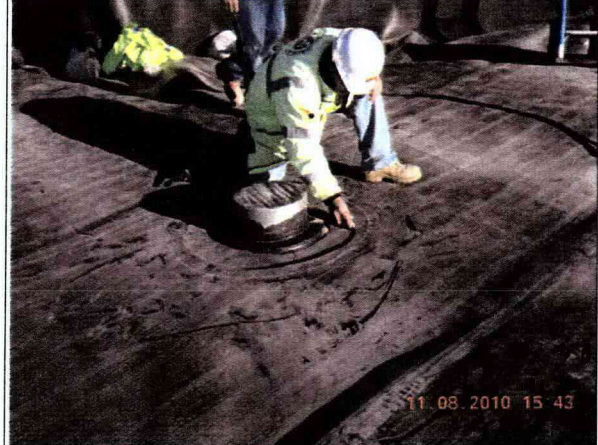


## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Tank Liner Installation



Tank 4- ESI is pressure testing the secondary seams in Tank 4.



Tank 4- ESI is fitting the secondary liner to the pipe penetrations in the floor of Tank 4.



Tank 4- ESI is fitting the secondary liner to the pipe penetrations in the floor of Tank 4.



Tank 4- The floor of Tank 4 is in place.



Tank 4- ESI is installing the batton strip in Tank 4.



Tank 3- Overnight rains have left standing water in Tank 3.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Tank Liner Installation



Tank 4- Overnight rains have left standing water in Tank 4.



Tank 4 – ESI is sweeping the floor of Tank 4 so the rainwater can be removed.



Tank 4- TWS is pumping the water out of Tank 4.



Tank 3 – ESI is installing more bolts in the baton strips in Tank 3.



Tank 4-ESI is using an electric leaf blower to dry the liner in Tank 4 so they can continue to weld.



Tank 4-ESI is using an electric leaf blower to dry the liner in Tank 4 so they can continue to weld.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 40 (11/8/10 TO 11/13/10)

### Tank Liner Installation



Tank 3-TWS is beginning to fill Tank 3 with water in preparation for the electronic leak test.



Tank 4-ESI is spark testing the welds in Tank 4 that are inaccessible to the vacuum box.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Geosynthetic Placement



Facing S – ESI is vacuum box testing the extrusion welds on the rain flap on the south slope of Cell 10.



Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.



Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.

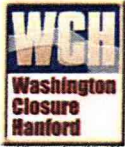


Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.



Facing NE – ESI is leistering the 8-oz fabric over the last of the primary drainage gravel in the SE corner of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Operations Placement



Facing N – TWS is placing operation soil on the south half of Cell 10.



Facing NE – TWS is placing operation soil on the south half of Cell 10.



Facing N – TWS is placing operation soil on the south half of Cell 10 near the south toe.



Facing NW – TWS is using a CAT D6 dozer to grade the operations soil in Cell 9 to design grade.



Facing N – TWS is construction the east termination berm on the north half of Cell 10.



Facing NW – TWS is placing operation on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Operations Placement (Continued)



Facing N – TWS is pushing operations soil up the north slope of Cell 10.



Facing N – TWS is placing operations soil on the south half of Cell 10.

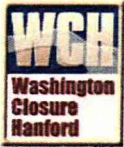


Facing SW – TWS is working to finish the operations soil on the south slope of Cell 9.



Facing SW – The south half of the Cell 9 floor and the Cell 9 north slope is finished to grade.





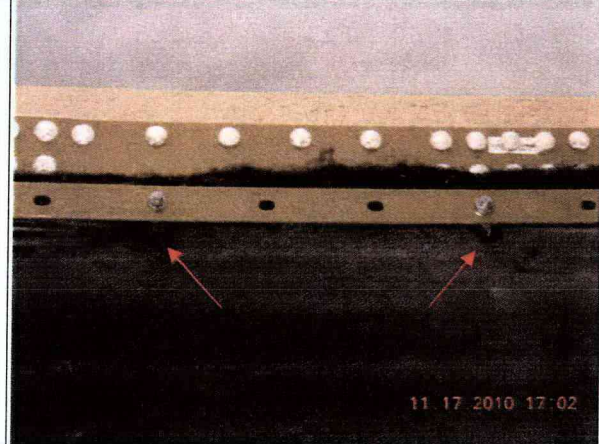
ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Tank Liner Installation



Tank 4 – ESI is finishing the secondary vacuum tests in Tank 4.



Tank 3 – While Tank 3 was filled with water portion of the secondary liner were pulled downward tearing the liner and leaving holes below the batton strips.



Tank 4 – ESI making secondary repairs to leaks found during the electronic leak survey.



Tank 3 – ESI cleaning the floor of Tank 3 in preparation for placing secondary geocomposite.

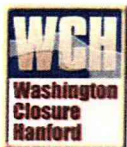


Tank 3 – ESI installing secondary geocomposite.



Tank 3 – ESI installing secondary geocomposite.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Tank Liner Installation



Tank 3 – ESI wrapped the edges of the secondary geocomposite to protect the secondary and primary liner systems.



Tank 4 – ESI is installing secondary geocomposite in Tank 4.

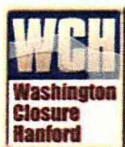


Tank 4 – ESI is installing secondary geocomposite in Tank 4.



Tank 4 – ESI is installing secondary geocomposite in Tank 4.

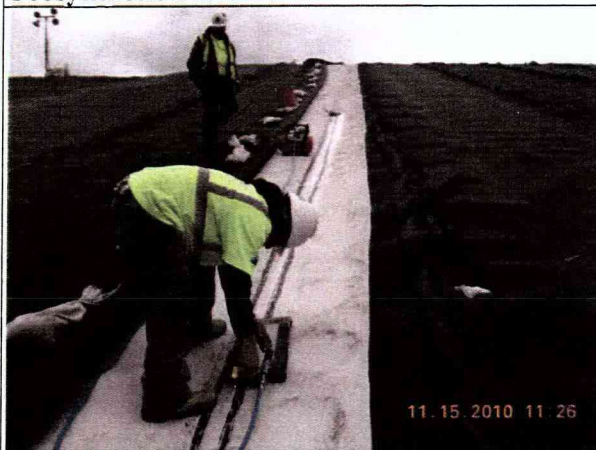




ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Geosynthetic Placement



Facing S – ESI is vacuum box testing the extrusion welds on the rain flap on the south slope of Cell 10.



Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.



Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.

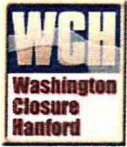


Facing N – ESI is placing the secondary geocomposite around the rain flap on the south slope of Cell 10.



Facing NE – ESI is leistering the 8-oz fabric over the last of the primary drainage gravel in the SE corner of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Operations Placement



Facing N - TWS is placing operation soil on the south half of Cell 10.



Facing NE - TWS is placing operation soil on the south half of Cell 10.



Facing N - TWS is placing operation soil on the south half of Cell 10 near the south toe.



Facing NW - TWS is using a CAT D6 dozer to grade the operations soil in Cell 9 to design grade.



Facing N - TWS is construction the east termination berm on the north half of Cell 10.



Facing NW - TWS is placing operation on the south slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 36 (10/11/10 TO 10/16/10)

### Leachate Transmission System



Facing S – BMWC installing the primary high flow pump in the Cell 9 Crest Pad.



Facing S – BMWC and TWS performing the 2-hour pump test for the secondary pump in Cell 10.



Facing NE – TWS compacting the fill around MH-35.



Facing E – TWS backfilling and compacting the Tank #4 concrete ringwall.

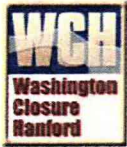


Facing N – TWS subcontractors constructing Tank #3.



Facing N – TWS subcontractors constructing Tank #3.





ERDF CONSTRUCTION CELLS 9-10

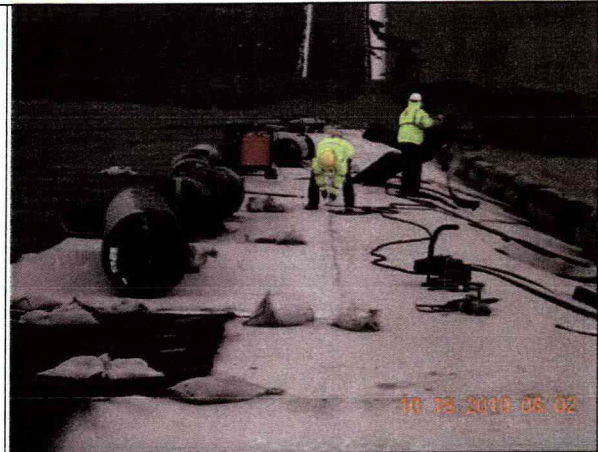


## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Geosynthetic Placement



Facing S – ESI trying end-to-end seams on the secondary composite on the south slope of Cell 10.



Facing N – ESI extrusion welding the primary to secondary along the east liner termination.



Facing E – ESI continuing deployment of primary geomembrane on the south slope of Cell 10.



Facing N – ESI deploying 16-oz geotextile along the east termination of Cell 10.



Facing S – ESI deploying 16-oz geotextile along the east termination of Cell 10.





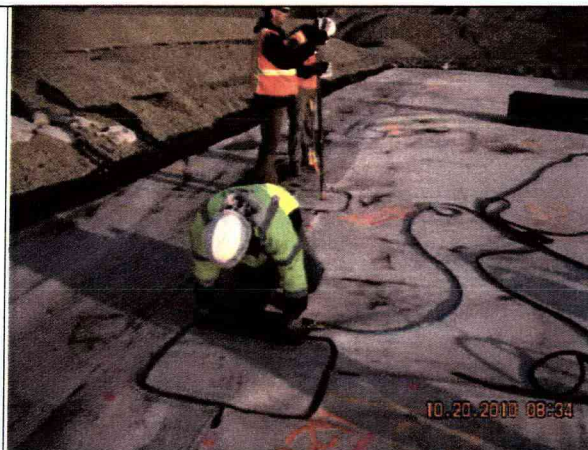
ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Geosynthetic Placement (Continued)



Facing E – ESI continuing deployment of primary geomembrane on the south slope of Cell 10.



Facing E – ESI performing non-destructive seam pressure test on primary seams in Cell 10.

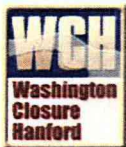


Facing SE – ESI deploying 16-oz fabric across the floor of Cell 10.



Facing Down – Due to failing destructive testing ESI located and repaired extrusion welds that had been covered by 16-oz fabric.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Drainage Gravel



Facing N – TWS spreading drainage gravel in the northeast corner of Cell 10 with a track hoe.



Facing N – TWS grading the drainage gravel in the northeast corner of Cell 10.



Facing NW – TWS using a CAT D6 dozer to place primary drainage gravel on the floor of Cell 10.



Facing N – TWS using a CAT D6 dozer to place primary drainage gravel on the floor of Cell 10.

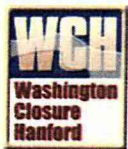


Facing NW – TWS using 2-CAT D6 dozers to place primary drainage gravel on the floor of Cell 10.



Facing W – TWS a CAT D6 dozers to place primary drainage gravel on the floor of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

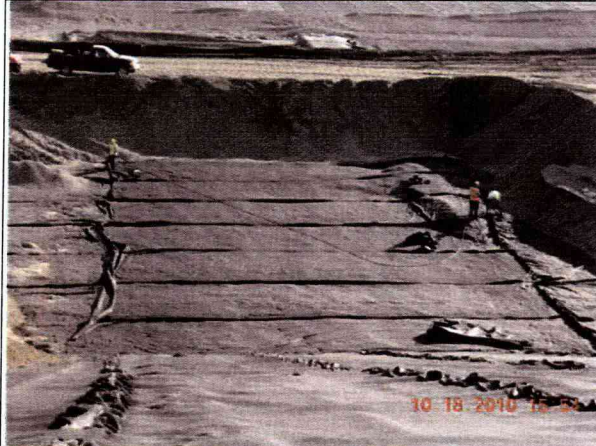
### Cell 10 Sump



Facing Down – BMWC completing the weld the 12-in primary collector pipe immediately south of the Cell 10 sump.



Facing N – TWS using the CAT 312 to place Type B drainage gravel in the Cell 10 sump.



Facing S – ESI placing and sewing 16 oz. geotextile over the Type B drainage gravel in the Cell 10 sump.



Facing S – TWS placing operations soil in the Cell 10 primary riser trench. A TWS labor continuously haunched the soil under the pipes.



Facing S – TWS moisture conditioning and compacting the Cell 10 primary riser pipe backfill.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

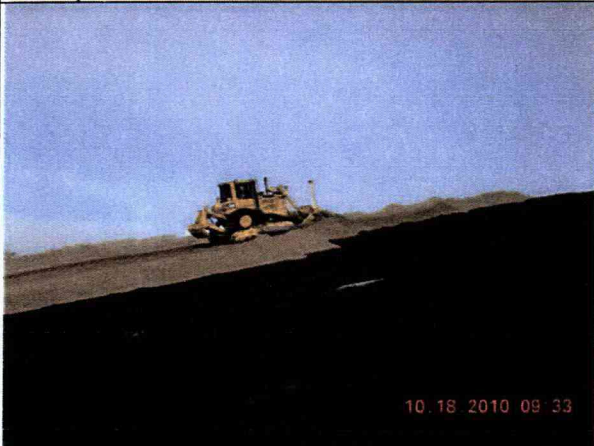
### Operations Placement



Facing SW – Two CAT D6 dozers are placing operations soil on the north slope of Cell 10.



Facing N – A Komatsu truck is dumping a load of operations soil at the toe of Cells 9/10.



Facing NW – A CAT D6 dozer is placing operations soil on the north slope of Cell 10 in a 1-ft high lift.



Facing SE – TWS is placing operations soil near the NE corner of the floor of Cell 10.

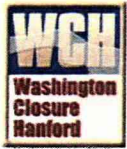


Facing S – TWS propping the Cell 10 termination rain flap on the north slope up with sand bags prior to operations placement.



Facing NW – TWS spreading operations soil on the north slope of Cell 10 in a 1-ft high lift.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Operations Placement (Continued)



Facing NW – TWS spreading operations soil up the north slope in a 3-ft high lift over the in-place 1-ft high lift.



Facing N – TWS pushing operations soil on the north slope of Cell 10 to the rain flap



Facing SW – TWS spreading operations soil on the north slope of Cell 10 in a 1-ft high lift.



Facing NW – TWS spreading operations soil up the north slope in a 3-ft high lift over the in-place 1-ft high lift.

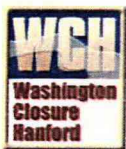


Facing NW – TWS spreading operations soil up the north slope in a 3-ft high lift over the in-place 1-ft high lift.



Facing S – The rainflap on the north slope of Cell 10.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Anchor Trench Backfill



Facing W – TWS moisture conditioning the north anchor trench backfill.



Facing W – TWS placing backfill in the north anchor trench east of the Cell 10 crest pad building.



Facing W – TWS excavating the un-welded air release holes left open in liner in the north anchor trench so ESI could complete the welds.



Facing W – TWS excavating the un-welded air release holes left open in liner in the north anchor trench so ESI could complete the welds.



Facing SW – TWS cleaning and removing loose soil from the geomembrane in the anchor trench.



Facing W – ESI completing the welding of the air-release holes in the north anchor trench.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 37 (10/18/10 TO 10/23/10)

### Anchor Trench Backfill (Continued)



Facing W – ESI also completed welding the anchor trench in the location of the Cell 10 riser pipes.



Facing W – After the welds were completed, TWS backfilled and compacted the excavated holes.

### Leachate Transmission System

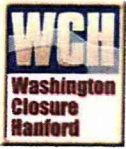


Facing SW – BMWC constructing the Cell 10 leachate collection piping in Crest Pad 10.



Facing N – TWS compacting the backfill around manhole #36





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Operations Placement (Continued)



Facing N – TWS is pushing operations soil up the north slope of Cell 10.



Facing N – TWS is placing operations soil on the south half of Cell 10.

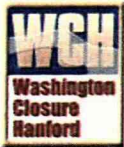


Facing SW – TWS is working to finish the operations soil on the south slope of Cell 9.



Facing SW – The south half of the Cell 9 floor and the Cell 9 north slope is finished to grade.





ERDF CONSTRUCTION CELLS 9-10

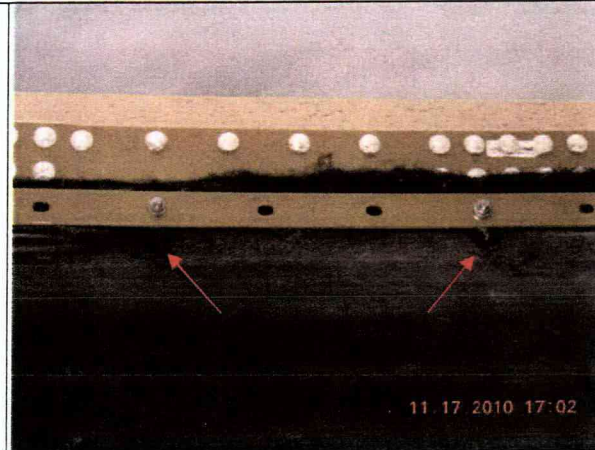


## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Tank Liner Installation



Tank 4 – ESI is finishing the secondary vacuum tests in Tank 4.



Tank 3 – While Tank 3 was filled with water portion of the secondary liner were pulled downward tearing the liner and leaving holes below the batton strips.



Tank 4 – ESI making secondary repairs to leaks found during the electronic leak survey.



Tank 3 – ESI cleaning the floor of Tank 3 in preparation for placing secondary geocomposite.

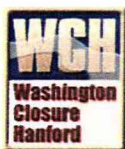


Tank 3 – ESI installing secondary geocomposite.



Tank 3 – ESI installing secondary geocomposite.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 41 (11/15/10 TO 11/20/10)

### Tank Liner Installation



Tank 3 – ESI wrapped the edges of the secondary geocomposite to protect the secondary and primary liner systems.



Tank 4 – ESI is installing secondary geocomposite in Tank 4.



Tank 4 – ESI is installing secondary geocomposite in Tank 4.



Tank 4 – ESI is installing secondary geocomposite in Tank 4.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### South Access Road

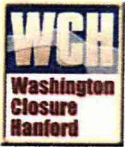


Facing W – TWS has placed and compacted the top course on the south access road, south of Cells 9 and 10.



Facing E – TWS has placed and compacted the top course on the south access road, south of Cells 9 and 10.



ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Operations – Termination Fencing



Facing N – Termination fence between Cells 9 and 10 prior to hanging the chain link fabric.



Facing SW – American Fence installing chain link fabric on the Cell 9/10 termination fence.

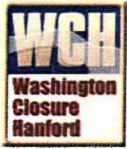


Facing N – American Fence has installed the Cell 9/10 Termination Berm.



Facing N – American Fence has installed the Cell 9/10 Termination Berm.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Raw Water Line



Facing E – TWS has excavated the trench for the raw water line extension south of Cell 10.



Facing W – TWS backfilling over the raw water line located south of Cell 10.



Facing Down – CQA conducting field compaction testing on the raw water line backfill.

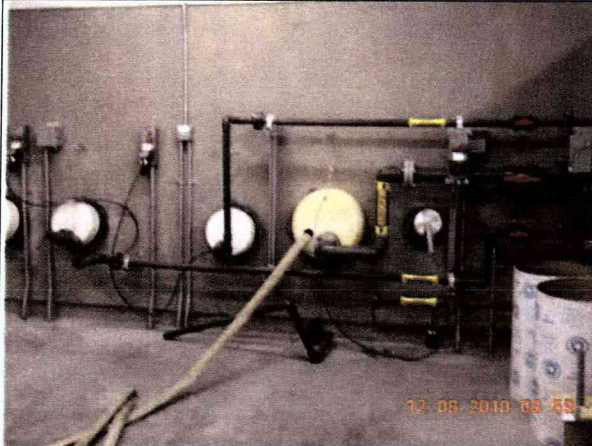




ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Crest Pad 9



Facing S – TWS beginning to place drainage gravel along the south toe of Cell 10.



Facing E – TWS placing drainage gravel along the south toe of Cell 10.

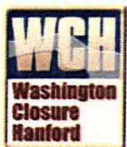


Facing NE – TWS placing drainage gravel along the south toe of Cell 10.



Facing NW – TWS placing drainage gravel near the toe of the south slope with a CAT D6 dozer.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Tank #3 Liner Installation



Facing E – Weekend snowstorms blanketed the floor of Tank #3 with snow and ice.



Facing Down – ESI used shovels and heaters to remove snow and ice from the geocomposite on the tank floor.



Facing E – ESI and TWS began constructing the center support for a tent to cover Tank #3.



Facing N – TWS and ESI are pulling a 150'x150' tarp over tank #3 so work can continue through the adverse weather conditions.

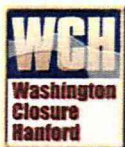


Facing N – The tarp has been installed over Tank #3.



Facing N – High winds began to cause damage to the tent over Tank #3. The tarp was subsequently removed.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Tank #4 Liner Installation



Facing W – TWS is beginning to remove storm water from the secondary liner in Tank #4.



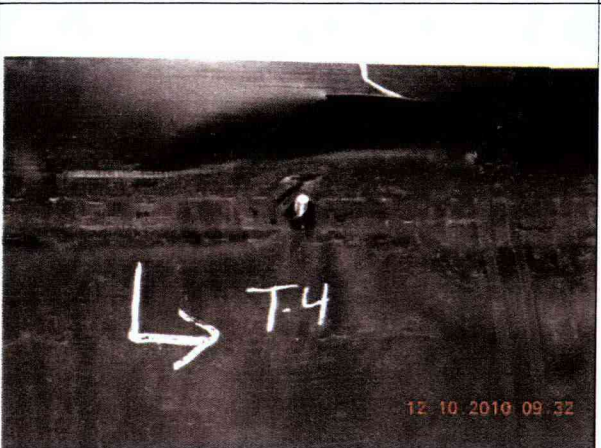
Facing S – After a majority of the storm water was removed, ESI began to hang primary liner panels on the walls of Tank #4.



Facing SW – ESI is hanging primary panel P-1 on the south wall of Tank #4.



Facing SW – ESI is continuing to hang primary liner panels on the walls of Tank #4.



Tank #4 – Bolt tears in the secondary liner on the north side of Tank #4. ESI repaired all bolt tears and more baton strip bolts were installed.



Facing SW – ESI utilizing a double wedge fusion welder to seam the primary panels on the walls of Tank #4.








ERDF CONSTRUCTION CELLS 9-10

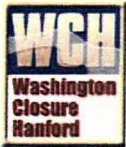


## CQA PHOTOGRAPH LOG WEEK 44 (12/6/10 TO 12/10/10)

### Manholes

	
<p>Facing E – American Electric has utilized a Ditch Witch trencher to trench in electrical conduit to MH-38 and MH-39.</p>	<p>Facing NE – American Electric has utilized a Ditch Witch trencher to trench in electrical conduit to MH-38 and MH-39 near Tank #3.</p>
	
<p>Facing Down – American Electric has utilized a Ditch Witch trencher to trench in electrical conduit to Tan k #3 transducer and MH's #21, #38 and #39.</p>	





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 45 (12/13/10 TO 12/16/10)

### Ancillary Work

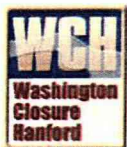


Facing NE – American Fence completing the installation of the Cell 10 termination berm fence.



Facing SW – Intermountain Material Testing performing moisture density testing on the operations soil in Cell 9.



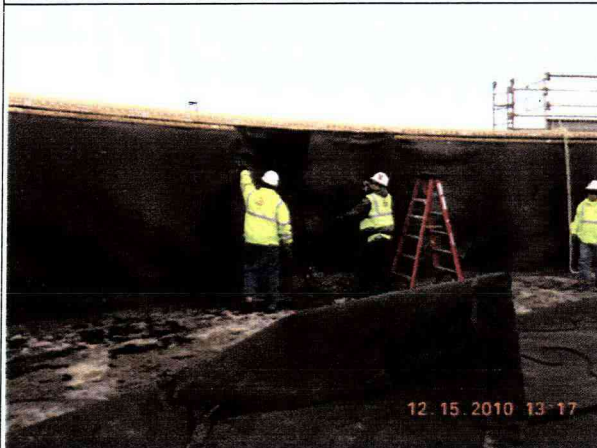



ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 45 (12/13/10 TO 12/16/10)

### Tank #3 Liner Installation



Facing NE – ESI cutting the secondary geomembrane in Tank #3 to remove the trampoline in the liner.



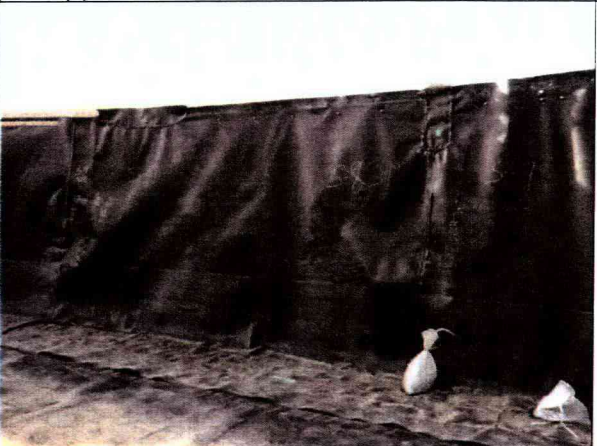
Facing NW – ESI removing the baton strip and anchor bolts in Tank 3 to reposition the secondary geomembrane.



Facing E – ESI using 2x4 wood beams to brace the geomembrane as it is pulled up the wall of the tank. After the geomembrane was pulled up past the anchor bolt tears, ESI replaced the anchor bolts.



Facing N – ESI placing new panel S-17 in the Tank 3 secondary geomembrane in order to remove the trampoline in the tank wall.

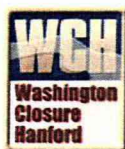


Facing NW – The new anchor bolt locations in Tank 3 secondary geomembrane replacing the torn anchor bolt holes.



Facing NW – ESI extrusion welding the new panel S-17 in Tank 3 in order to remove the trampoline in the Tank 3 liner.





ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 45 (12/13/10 TO 12/16/10)

### Tank #4 Liner Installation



Facing E – ESI removing water and snowmelt from the secondary geomembrane in Tank 4.



Facing NW – ESI installing the electronic detector to be utilized by LLC during the electronic leak detection survey of the primary liner.



Facing N – ESI heat tacking a piece of geotextile over the electronic detector.



Facing SW – ESI installing the primary geomembrane in Tank 4.

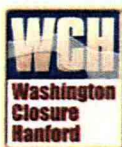


Facing N – ESI welding the primary geomembrane on the floor of Tank 3.



Facing down – ESI welding the floor drain to the primary geomembrane in Tank 4.





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 45 (12/13/10 TO 12/16/10)

### Tank #4 Liner Installation Continued



Facing NE - ESI removing storm water from the primary geomembrane in Tank 4.



Facing down - ESI performing vacuum testing on the primary geomembrane in Tank 4.



Facing SE - ESI placing the baton strip and anchor bolts in the primary geomembrane in Tank 4.



Facing SW - TWS filling Tank 4 with water for the electronic leak detection survey.



Facing NE - LLS performing the leak detection survey on the primary geomembrane in Tank 4.



Facing down - Leak location markers left by LLS on the primary in Tank 4.



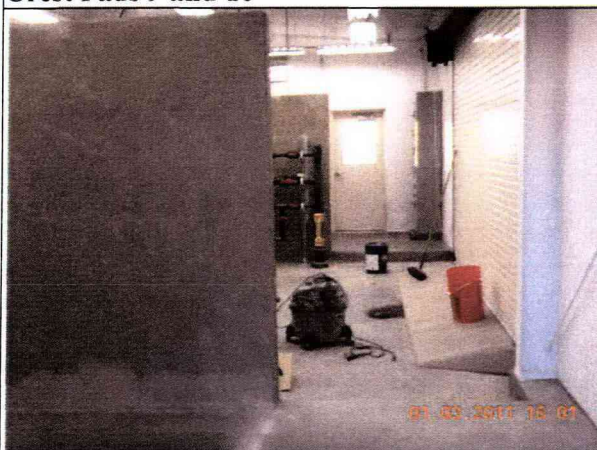


ERDF CONSTRUCTION CELLS 9-10



## CQA PHOTOGRAPH LOG WEEK 46 (1/3/11 TO 1/6/11)

### Crest Pads 9 and 10



Facing W – Purcell completed sanding the floor of Crest Pad 9 and placed sealant in the control room of Crest Pad 9.



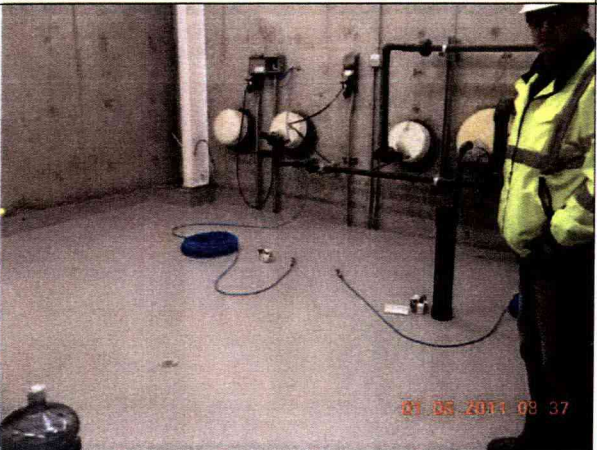
Facing SW – Purcell sanding the floor of Crest Pad 10.



Facing E – Purcell completed coating the floor of Crest Pad 9 with Amerlock 400.

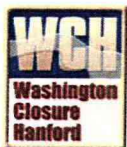


Facing W – Purcell completed coating the floor of Crest Pad 10 with Amerlock 400 and placing sealant on the floor of the control room.



Facing SW – CQC and Total Energy calibrating the transducers in Crest Pad 10





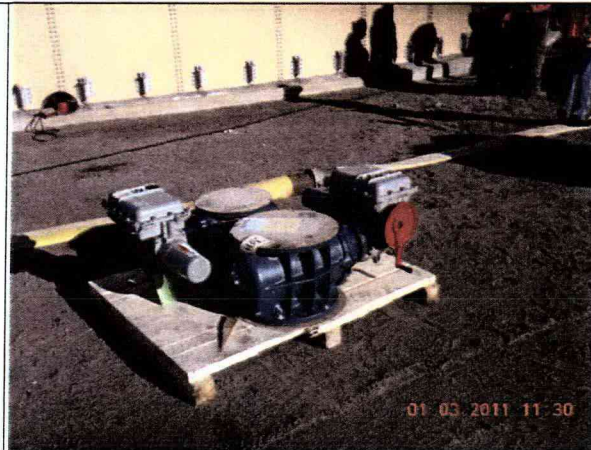
ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 46 (1/3/11 TO 1/6/11)

### Leachate Transmission System



Facing NW – TWS lifting the top section off of MH-39.



Facing NE – The MOV for MH-39 and MH-17.



Facing NE – The existing piping and valve in MH-39



Facing NE – The existing piping and new MOV valve installed in MH-39.

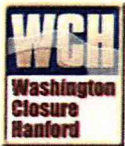


Facing S – Stoller removing the leachate from the pipe upstream of MH-17.



Facing down – BMWC removing the existing MOV and piping from MH-17





ERDF CONSTRUCTION CELLS 9-10

## CQA PHOTOGRAPH LOG WEEK 46 (1/3/11 TO 1/6/11)

### Tank #4 Liner Installation



Facing S – Stoller removing the leachate from the piping upstream of MH-9.

Facing down – American electric installing the electrical components of the MOV in MH-39.



Facing SE – BMWS installed the new MOV in MH-17. The MOV had to be tilted sideways to fit in the manhole.

Facing SE – BMWC replacing the existing piping in MH-17.



Facing NW – The existing piping in MH-18.

Facing down – American electric installing the electrical components of the MOV in MH-18.





ERDF CONSTRUCTION CELLS 9-10

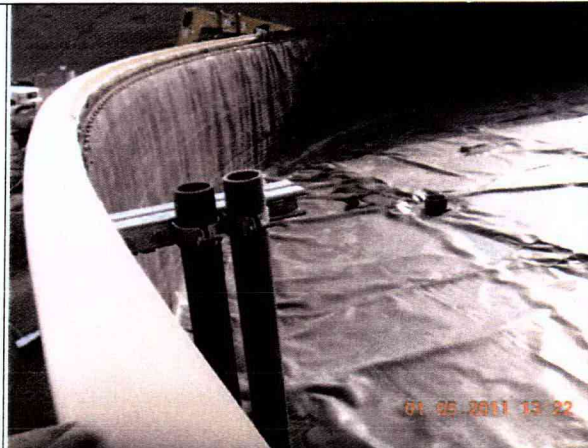


## CQA PHOTOGRAPH LOG WEEK 46 (1/3/11 TO 1/6/11)

### Tank #3 and Tank #4



Facing NW – BMWC installed the transducer pipe inside of Tank 4 and the transducer calibration pipe on the outside of Tank 4.



Facing S – The transducer pipe on the inside of Tank 4.



Facing SW – The transducer calibration pipe was installed on the outside of Tank 4.